

Demolition and adaptation at the CB1 development, Cambridge

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Abstract

Cambridge is a historic city in the UK with an international reputation. The CB1 development is a major real estate regeneration project around the train station aiming to provide a gateway to the city. Once complete it will provide over 50,000 sq m of offices; 5,000 sq m of retail; 1,250 student units and 330 residential dwellings. When creating such a masterplan on a brownfield site with multiple existing buildings and in a sensitive context, multiple decisions to demolish or adapt need to be made.

This paper tracks the history of the CB1 development through a review of planning documentation and media articles, and through interviews with key stakeholders, including the developers, town planners, architects, engineers and local campaigners, identifying where and how key decisions relating to adaptation and demolition were made.

The case study reveals complexities of decision-making in a real-world context. For example, for some of the existing buildings there were conflicting viewpoints about their future. The demolition of a Victorian terrace in favour of two new-build office blocks saw opposition from a local campaign group and the city councillors. However, the planning refusal was taken to appeal by the developers, who were then granted permission by the Planning Inspectorate. Arguments put forward included the lack of architectural significance, supported by the building not being listed and the public benefit brought about by demolition.

The paper also explores the technical aspects associated with buildings which were demolished or retained. The exploration builds upon international research analysing features that increase adaptation potential. Considering such aspects as, the condition of the building; floor to ceiling heights; standardised floor plates; and intangible values, such as architectural significance.

The paper therefore assesses the CB1 development from both a technical and social perspective. The conclusions encourage actions to ensure holistic and sustainable decision-making in the future, recommending: the need for early stakeholder engagement; clarity on the strength of outline planning permission; and the recognition that heritage conservation and new build can both contribute to place-making. The paper also demonstrates the need for compromise, with inevitable conflicting viewpoints on a development of this scale.

1. Introduction

Cambridge is a historic city in the United Kingdom (UK) with an international reputation. The CB1 development is a major real estate regeneration project around the train station aiming to provide a gateway to the city. This paper uses the CB1 site as a case study to gain an in-depth understanding of how and why decisions were made about the future of existing buildings on the site from different stakeholder perspectives. This understanding is important because it highlights if any lessons can be learnt in a time where there is an increased emphasis on brownfield redevelopment through England's 2017 White Paper (DCLG, 2017) and the Housing and Planning Act 2016 (HM Government, 2016).

This paper's literature review outlines previous research regarding the decision to demolish or adapt existing buildings and provides an overview of the factors which need to be considered during the redevelopment of large areas of land. The research methods embedded in the descriptive case study are then explained, followed by a discussion of what major factors have affected the decision to demolish or adapt existing buildings within the CB1 masterplan and what lessons can be learnt.

2. Literature Review

England's 2017 White Paper "*Fixing our broken housing market*" discusses the Government's commitment to protecting Green Belt land (land where development is restricted) and the need for progress in the redevelopment of brownfield sites (DCLG, 2017), referring to previously developed land (Baker et al., 2017; Dixon et al., 2008). Benefits of brownfield regeneration include reducing urban sprawl; increasing the economic vitality of an area; and the removal of contamination (Dixon et al., 2008). Although it is encouraging brownfield redevelopment is being supported, it is important the decision of adaptation or demolition is appropriately made to ensure sustainable decision-making (Wilkinson et al., 2014).

A range of decision-making toolkits exist which assess individual office buildings for their adaptation potential or possible future (Wilkinson et al., 2014). Baker et al's (2017) review of these toolkits showed that they were not applicable to masterplan sites, referring to large redevelopment projects, as other factors such as land efficiency and transportation systems have to be considered. Baker and Moncaster (2017) built upon existing research through interviews and focus groups with key stakeholders including: planners; engineers; heritage society representatives and property consultants. Their preliminary results indicate that frequently mentioned decision-making criteria include: technical aspects such as building condition; layout and dimensions; services and function; alongside social factors such as designations (listed buildings protected by policy) and heritage values. Their paper begins to explore how criteria such as economic viability may be viewed differently in a masterplan context. For example, some of the interviewees referred to the balance between 'place-making' and technical feasibility of adaptation. In some cases, if a building is analysed by itself, it may not be economically viable to keep it. At times, in the context of a masterplan, the cost could be offset by the rest of the development and the intangible values (those difficult to quantify and related to place-making) are perceived as more important. Baker and Moncaster (in Press) developed upon this investigation in their book chapter "*Adaptation and demolition in a masterplan context?*" and discussed other influencing factors, such as 'public benefit'. If a building is listed or in a conservation area, then one reason to justify demolition can be that other public benefits, such as employment or an improved transportation network will be provided.

At a masterplan level, the decision of demolition and adaptation sits within a complex network of other decisions that need to be made and are not necessarily mutually exclusive from one another. For example, Baker and Moncaster (in Press) refer to the Building Research Establishment's (BRE) Communities Assessment which scores masterplan projects on a range of criteria in terms of their sustainability. The main categories, which then have multiple sub-categories, include: governance; social and economic well-being; resources and energy; land use and ecology; and transport and movement (BRE, 2013). The sub-category 'existing buildings and infrastructure' sits within the 'resources and energy' category and accounts for 2 credits out of the 118 available. This simply emphasises that existing buildings cannot just be looked at without considering the context provided by the rest of the masterplan.

3. Methodology

As discussed, the decision-making process on masterplan sites is complex and value-laden. For this reason, qualitative research methods have been used to understand the context in which decisions were made and consider various people's perspectives (Gibbs, 2008). Different qualitative methods of data collection and analysis are embedded within the case study strategy including a review of publically available planning documentation and interviews with decision-makers and/or stakeholders (those affected by the decision).

The case study was chosen using purposive and opportunistic sampling techniques. The CB1 case study is referred to by Baker and Moncaster (in Press) where the parameters for case study selection are set. This paper provides a more in-depth descriptive analysis of the investigation and aims to provide a review of influencing factors in the decision-making process. Documents analysed include those associated with the accepted Outline Planning application¹, such as minutes from meetings with design panels and consultation responses (a detailed list is provided in Appendix 1). These documents were analysed using grounded theory methods; the text was coded to see what themes and theories emerged about the decision-making process (Robson and McCartan, 2016). For example, every time a new point was raised in the text, the relevant sentence or paragraph was assigned a code indicating what it was about. The software used was HyperResearch which allows the user to see the frequency a code has been used and all the information about a particular code in one document. After the initial set of coding, the codes were reviewed to assess if there were any overarching themes.

Following the analysis of the masterplan documentation, subsequent planning applications related to the demolition or retention of buildings on the CB1 site were analysed (see Appendix 2). For the purposes of this paper, the coding only reflects the consultation responses to see what themes emerge as 'points of discussion'.

The document analysis is supported by 13 semi-structured interviews with decision-makers and stakeholders involved in the project including: the developer; strategic engineer; heritage consultant; planning consultant; County Council officer; former City Council conservation officer; structural engineer; masterplan architects; local residents (x3); chair of the planning committee from 2003-2010; and quantity surveyor². The majority of interviews were recorded, those which were not were because the interviewee preferred not to be and notes were taken instead. The interviews and notes were transcribed. For this paper, the interviews are being used as a form of triangulation to support and validate the theories which have emerged from the document analysis (Robson and McCartan, 2016).

4. Case study

4.1. Context

The redevelopment of the area surrounding and including Cambridge railway station was recognised as an opportunity to transform the entrance to the city in the 2004 Station Area Development Framework (SADF) (Cambridge City Council, 2004). In the SADF produced by Cambridge City Council (CCC), they acknowledge that the site had been of interest to developers over the preceding ten years. The document outlines the aspirations for the area including the "*creation of a high quality transport gateway*" (p.6) and provides a site analysis including an identification of key viewpoints; transport routes; indicative land uses and heights. A conservation area appraisal attached as an appendix provides details on listed buildings,

¹ In England Outline Planning can be used at an earlier stage of the planning process to determine whether planning permission will be granted. The application will outline the massing; quantity and use of the proposed buildings. The Outline Application can then be followed up with a 'reserved matters application' which provides more details, such as the proposed appearance of the buildings. The reserved matters applications tend to be for smaller plots of land within the masterplan proposal. If there are proposed changes from the parameters set out in the outline planning application, the developers have to apply for a full application (Baker and Moncaster (In press)).

² From this point on, reference to the design team includes: the developer; heritage consultant; planning consultant; quantity surveyor; architect and strategic engineer.

'buildings of local interest' (BLIs) and 'buildings with townscape value'. The purpose of the document was to set out principles for developers preparing development proposals for the area (ibid.). Before the current development, the area surrounding Cambridge Station was perceived as a "poor first impression" (p.12) with large areas of unused space; insufficient cycle parking and limited facilities for buses and taxis. Figure 1 provides an outline of the existing site.



Figure 1: Existing map of Cambridge Station area. Image and data sources: Ashwell CB1 Ltd. (2008b); Cambridge City Council (2004).

Paul Thwaites, the founder and director of Ashwells (Bloomberg, 2017) purchased Great Eastern House in August 2001 and continued to buy land as it became available (Estates Gazette, 2003). The purchase of the Rank Hovis site (area behind and including Fosters Mill) was the last of 19 acquisitions in the area (Planning, 2004). In January 2006, Ashwells submitted a planning application (Ashwell CB1 Ltd., 2006) to redevelop the station area but it was refused permission for 26 different reasons including (but not limited to): negative impact associated with increases in traffic; a failure to embrace best practice design principles; the height and scale of proposed buildings and failure to show an enhancement of the listed station building (Dyer, 2008a). Although pre-application advice had been sought before submission, differences of opinion between the planning office and developers had not been resolved. Interviews indicate that following the rejected application, Ashwells employed a new planning consultant and the application was stripped back to improve upon the 26 reasons for refusal. Various interviewees from the

design team felt that during the 2nd application, the communication with the planning office was key to achieving success when the new Outline Planning application was submitted in 2008 and consequently approved in 2010. The approved application outlines the provision of over 50,000 sq m of offices; 5,000 sq m of retail; 1,250 student units and 330 residential dwellings (Ashwell CB1 Ltd., 2008a).

The masterplan was designed by Lord Richard Roger's architectural practice. An interview with a member of the architectural team suggested that Richard Roger's was chosen because of his involvement in the Urban Task Force - an initiative established in 1998 which focused on brownfield redevelopment, particularly around transport hubs. Despite this, interviews with opposed residents showed a strong preference towards the use of local architects because they thought they would have a better understanding of Cambridge and its character, whilst others felt Rogers' name was only being used to influence planning decisions (Wainwright, 2017). Following the approval of Roger's masterplan, Ashwell's went into administration during the recession. A new firm, Brookgate Ltd, which includes former directors of Ashwells emerged and are the current developers taking the scheme forward (Havergal, 2009).

Figure 2 shows a timeline of planning applications associated with the CB1 site from 2005 (only those submitted by Ashwells or Brookgate). The start of the bar indicates when the planning application was received by Cambridge's planning office and the end of the bar shows the 'Decision Issued Date'. The figure emphasises the volume of applications associated with the site; amount of time required to process applications; and the way in which the Outline Planning system can operate (approval followed by a series of applications focusing on smaller plots of land). It is clear that some applications were also submitted before the approved Outline Consent, one of which included former buildings on the Rank Hovis site and the redevelopment of the Mill and Silo building (Ashwell CB1 Ltd., 2005). Outline Consent is often preferred by developers because it provides them with certainty and avoids piecemeal redevelopment. During interviews with the design team there were discussions about the need for the masterplan to have that flexibility because local and global markets change and they need to react to that - "*the skill of a good masterplan is adaptability*".

The outline process and subsequent applications have received critique in interviews with local residents because the design team were making changes at the various stages which they felt compromised the integrity of the initial masterplan, such as alterations to the public realm and increasing the size of individual buildings. Residents expressed frustration with the planning process and felt that the Outline Planning Consent was already a step-change from the SADF and then the subsequent applications were another step-change. From a review of the planning documentation, the developers defended these changes to the planning office because the economic climate had changed since the recession and they needed to ensure the development was economically viable.

A ceremony was held in April 2011 to officially mark the start of work on the CB1 development and the construction is ongoing as of June 2017. One of the key benefits identified during the interviews with the design team was that the core consultancy team (excluding the architects) remained the same during this time. This ensured that the team including engineers; quantity surveyors and heritage consultants, already had a strategic understanding of the site. Different architects were used after the development of the masterplan as the design team wanted variety within the area and this is common with masterplan designs. However, the subsequent choice of architects has been criticised by local residents and in the recently published Guardian (newspaper) article by Oliver Wainwright (2017), a trained architect who stated the quality of the development had suffered because the developers chose to use "*uninspiring commercial firms*" following the Outline's approval.

Start of the bar = date planning application received. End of the bar = 'Decision Issued Date'

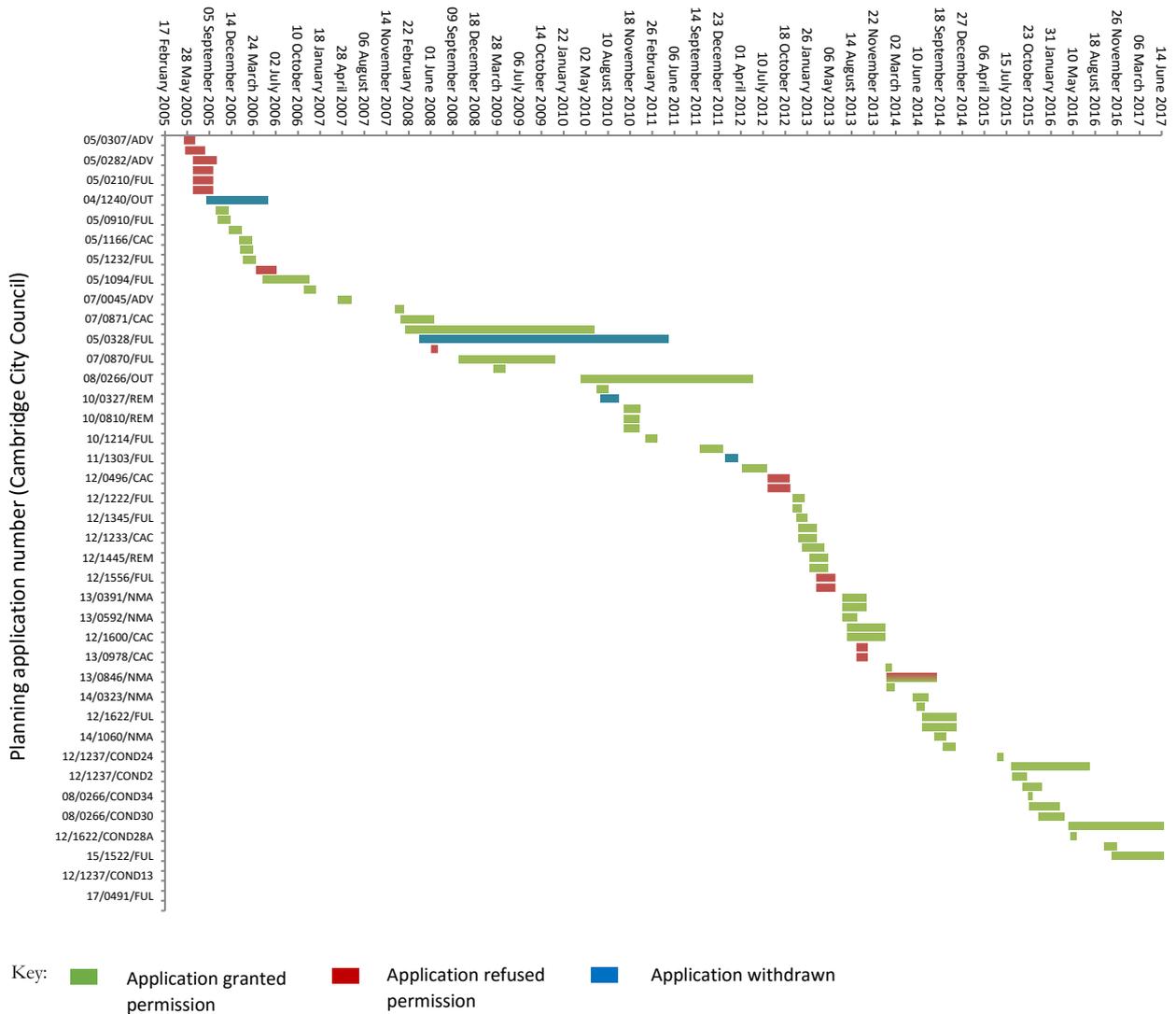


Figure 2: Timeline of planning applications relating to the CB1 site submitted by Ashwells or Brookgate.
Data Source: Cambridge City Council (2017)

4.2. 'Points of discussion' raised at masterplan stage

Figure 3 indicates the topics (overarching themes) discussed during the meetings preceding the submission of the final planning application and topics raised within the consultation responses. As stated in the methodology, the numbers reflect the number of times a new point was raised within the text, in some cases these points may have been repeated later in discussion and this will be included as another 'point' in the final figures. The aim is to show what the main themes of discussion were. It is clear that the conversations at this point in time were dominated by issues related to transportation and masterplan design features.

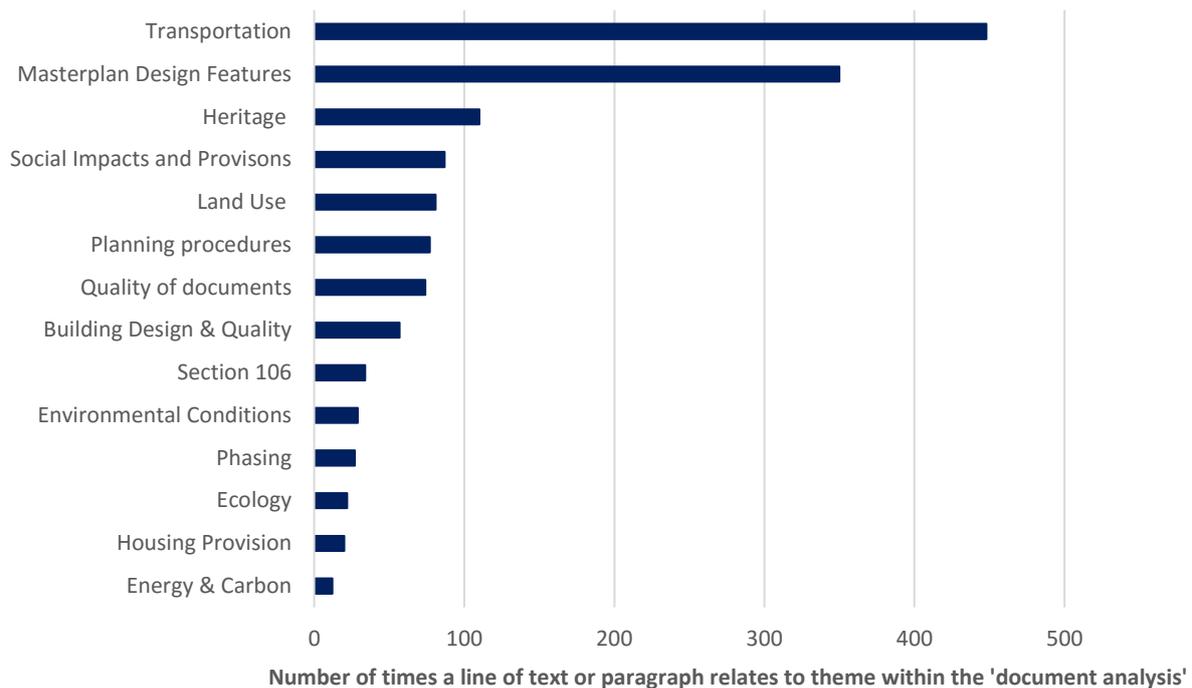


Figure 3: Overarching themes emerging from 'document analysis' - including minutes and consultation responses. Only includes themes with frequency of mentioning > 10.

Figure 4 displays the sub-categories which the overarching themes: transportation; masterplan design features and existing buildings encompass. The range of topics emphasises the complex nature of a masterplan. Discussion points relating to transportation included: whether there would be an increase in traffic congestion; the proposed cycle routes not being sufficient; the location of bus stops and public transport routes; and the safety of pedestrians and cyclists, particularly in the square situated in front of the station. Points raised regarding masterplan design features included: the height of the proposed new buildings; the station square design and the provision of public/open space within the curtilage of the site. One of the reasons for refusal of the first application had been the height of the buildings and this remained a concern for some consultees as the SADF stated: *“The Mill and Silo should remain as the tallest buildings in the area to create local landmarks, with key views preserved”* (Cambridge City Council, 2004, p.30). In the application, the landmark building, which is to replace Wilton Terrace and its surroundings, will be taller than both of these. Since the refused application, the overall heights were reduced and the justification given for the height and position of the landmark building was to allow heights to step up to a ‘landmark’ along Station Road as it was not appropriate to have the tallest building on the square. Although this justification was accepted by the planning office and ultimately the councillors, an independent conservation consultant asked to review the scheme felt that there was *“little reasoned justification of any need for an additional orientation point”* as it would dominate the existing landmarks (Warshaw, 2008, p.8).

The impact on heritage which this paper will now focus on was raised 110 times in the analysis of the documents. The majority of points related to: the demolition of existing Buildings of Local Interest (BLIs); the negative impact the development would have on the Conservation Area and character of the city; alongside compromising the setting of the nationally listed station.

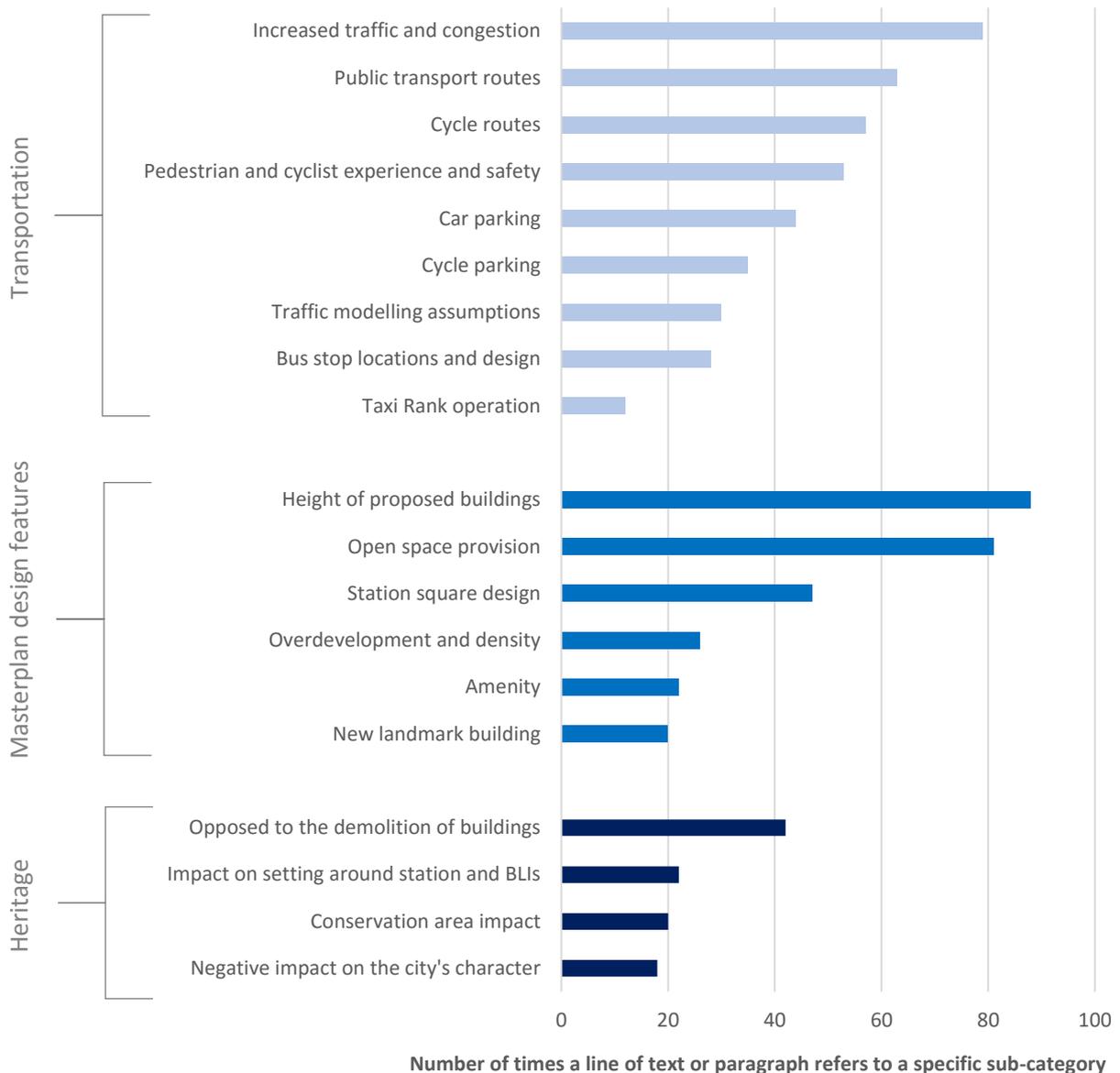


Figure 4: Regularly mentioned topics from 'document analysis' - including minutes and consultation responses. Only includes topics with frequency of mentioning > 10.

The analysis of subsequent applications (those after Outline) showed design features of existing buildings; the quality of the new build; materials used and cycle and car parking for individual buildings were regularly discussed. This emphasises the difference between the masterplan Outline application and the applications for smaller areas within the site, as the Outline looks at the 'big picture' and subsequent applications are more detailed. Whilst in discussion with a member of the architecture team, they provided an analogy of the masterplan being like jelly moulds which set out the massing and location of buildings alongside the public realm.

4.3. Reasoning for building retention

During the submission for the accepted planning application, a Historic Environment Analysis (QUBE, 2008) was provided which built upon work completed in the SADF, and there was a chapter in the Environmental Statement (Volume 2) entitled "*Heritage, townscape character and visual quality*" (Ashwell CB1

Ltd., 2008b). The built heritage and the existing buildings significance was assessed alongside an analysis of the impact and any mitigation required.

4.3.1. Designations

The only nationally listed building within the curtilage of the Outline Planning application was the railway station, which was and remains Grade II listed by Historic England (2017). The main station building was constructed in 1845 and various wings and extensions (also listed) were built in the second half of the 19th century (Cambridge City Council, 2004). The SADF indicated that the station buildings should be retained and protected from ‘unconsidered alterations’. Interviews indicated that the station was never considered for demolition because of its nationally listed status.

A representative from Roger’s architects discussed the small scale of the existing station relative to other cities such as Manchester or Liverpool, therefore the aspiration was to create a sense of arrival to the city through the public square rather than the station building itself. Within the application the demolition of the Station’s 19th Century eastern extension which was used by the British Transport Police (BTP) was proposed to facilitate the station square design (Ashwell CB1 Ltd., 2008b; Cambridge City Council, 2004). Although English Heritage, now Historic England, felt that the application included “*impressive research and appraisal of the historic character of the listed building*” and that the proposed alterations to the ticket hall were appropriate, they were not convinced that this wing could not be utilised or retained and opposed the development (Dyer, 2008b, p.56). At a later date, CB1 was mentioned as an area of transformation with Historic England’s ‘Constructive Conservation’ report. In this they state “*English Heritage accepted the demolition of other [buildings], as their replacement by buildings of high quality design and materials with significant upgrading of public realm will improve the setting of the Grade II listed station*” (Historic England, 2013, p.14). However, some local residents and critics of the development feel that the quality of the replacement new build is not sufficient and has not been appropriately enforced (Wainwright, 2017).

An issue which became apparent regarding the station square during interviews was its phasing. The first part of the square to be completed was the taxi rank, followed by a smaller area allowing for pedestrian access (see Figure 5). This has been critiqued by local residents saying the area is dominated by cars and does not reflect the public square that was proposed at Outline. This issue was covered by Cambridge News who quoted a former Conservative councillor saying he was “*outraged by our planning system*”. In response, Brookgate said the second half of the square, which involves the demolition of an existing building, is still to come and that “*the generous proportions of the Square, once complete, will be very apparent, compared to the current space focused on the transport interchange recently opened*” (Thomas, 2016). Although it is ideal for the public realm elements to be built first, often, as recognised in an interview with a County Council officer, these aspects of the scheme do not make the developer any money; first they need to create the necessarily cash flow to enable this investment. Through this analysis and research of the site, one way in which issues related to phasing could have been improved is better communication within the scheme. Although there is hoarding showing the masterplan vision, it would be useful to have a timeline and to show what is next, this will show the public the next steps in terms of the development and avoid people making assumptions about the final design and what is and is not complete at certain points in time.

4.3.2. Character and place-making

During an interview with the planning consultant they stated that the main benefits of building retention were providing character and place-making and that this is important because they were trying to create a place that would attract talented individuals and there has to be something distinctive. In the original Outline application, the Mill and Silo, constructed at the end of the 19thC, were to be retained. Both were identified as BLIs in the SADF as they reflected the area’s industrial past. The planning consultant said that they were standalone adaptable compared to some of the other historic buildings. In addition, these two buildings were used as a reference for building height in the development. However, this has been viewed upon cynically by some, including David Jones (2013), an author focusing on development in

Cambridge who said that “[The Mill] should have been demolished, because that was an eyesore, but I suspect they kept it because it was a justification for building other buildings up to the same height.” (Higginbotham, 2013).



Figure 5: Completed half of the public square in front of the station. Taxi Rank on the right hand side of photo. Area criticised due to traffic domination. Other half of square (behind where this photo was taken) not yet complete. Photo: Hannah Baker



Figure 6: Retained Mill building - converted to residential flats. Photo: Hannah Baker

In March 2010, a fire caused during the renovation of the Mill building, led to the collapse of the majority of the Silo building. Following the fire, the Mill was retained and has been converted by Hills Residential (plot sold on by Brookgate) into residential flats with Brookgate’s offices currently on the ground floor (Figure 6). The Silo was demolished and is to be replaced by new build residential. Some of the local

residents felt that the Silo should have been rebuilt and also feel that it is disappointing that the replacement building will not be used as an archive for the city records (the proposed use of the Silo) as this will have enhanced the cultural aspect of the scheme. Discussions with the design team indicated that they felt it was not viable or desirable to rebuild the Silo, key reasons being it would not be authentic; they would struggle to meet building regulations; and the original design required changes anyway to make a new use feasible, so it did not make sense to replicate the building as it was before the fire. If more of the building had remained, such as the front gable there may have been more scope to integrate it into a new design. The heritage consultant did recognise that it was a shame that the Silo had gone because it would have enhanced the scheme at that corner of the public square.

In the SADF, 125 Hills Road, a former coal yard office built between 1863-1888, was identified as a BLI (Cambridge City Council, 2004). Initially the plan was to extend the new build student accommodation onto this plot. However, in the City Council's Conservation Officer's comments they indicated there had not been sufficient justification in the application to demolish the building. This was reiterated in meetings with the Design and Conservation Panel. As the building was on the edge of the scheme, the replacement with new build student accommodation was not considered fundamental to the masterplan vision. Instead, retention was favoured by interested parties because the scale of the building allowed the Victorian street scene to continue further along that road and retain the character. To make the building viable, the developer discussed adding a glazed extension at the rear to increase capacity; and the building is now used as a restaurant.

During conversations, members of the design team emphasised the use of public art to create character in the area, some of which is new and others include an old crane base reflecting the industrial past of the area and a statue of Ceres (a goddess of agriculture) has been located behind the Mill (her relocation was an aspiration outlined in the SADF). Furthermore, they felt that a successful aspect of the scheme had been pop-up shops with small businesses and a food-park (foodPark, 2017). This is relevant as adding character to the area is seen as one of the main benefits of building retention and indicates that place-making can also be achieved through public art and other interventions.

Despite these features, opposed residents feel that the whole area does not reflect Cambridge and could just be part of a city anywhere in Europe. This was reiterated by Wainwright (2017) who described the development as a "*generic clone-town scene*" rather than "*an illustrious seat of learning*". Residents believed there should be more mature trees, to reflect the green spaces that regularly pop up within the city and there should be more independent shops. In recent months, a few independent shops have opened in the area including an artisan bakery; barbers and restaurant but the main frontages surrounding the square are predominately chains; such as Sainsbury's; Wasabi and Pret. Interviews show that the reason these types of stores are located in these feature buildings is that it is often a preference of the funder because larger companies provide more security in terms of the tenure arrangements.

4.4. Reasoning for building demolition

4.4.1. Public Benefit

At the time of the planning application, policy 4/12 of the Cambridge Local Plan (CLP) only permitted the demolition of BLIs if the applicant could demonstrate that the building was incapable of being used for something beneficial or that there would be clear public benefits as a result of the development.

A key issue relating to public benefit which arose in relation to the CB1 masterplan was the need for improved transportation systems. For example, the SADF identified that there needed to be a fourth arm to the current junction on Hills Road (although the SADF plans show retention). In order for this junction to function as a bus only access route at the most efficient capacity, the design team explained that 127 and 127a Hills Road needed to be demolished and this was accepted by the City Council's Conservation Officer who felt justification had been given as it was "*essential for the transport interchange*", providing they were replaced by development of a high quality.

The public square in front of the station including the taxi rank was considered to be a fundamental design feature. In the SADF, Sleeperz hotel, built in 1863 as a railway building was considered to be “*the best of the remaining unlisted railway buildings*” and a strong justification was required for its demolition (Cambridge City Council, 2004, p. 48). Sleeperz and the BTP were identified as buildings to be demolished in order to facilitate the public square. However, some local residents and English Heritage (in reference to the BTP building) felt that the buildings could be incorporated into the scheme.

A key part of the process from the heritage consultant’s point of view was that they not only provided the justification for demolishing these buildings in the Environmental Statement but that they produced ‘shadow listed building and conservation area consents’. These are additional documents providing an extra level of justification in the revised submission. They felt this enabled them to show demolition and adaptation had been considered at this stage of the investigation and is potentially an aspect of the process others could learn from. However, residents and critics of the development, including the former Conservation Officer for the city, have shown frustration at the quality of the replacement new build and the lack of enforcement.

4.4.2. Masterplan vision

During conversations with one of the masterplan architects, they discussed the concept of the masterplan being developed from first principles in terms of key geometries for the transport routes and functions on the site. A review of land uses indicated that when arriving at the station, the larger buildings surrounding the square could create a formal space which could be used for commercial purposes and residential uses could be on the outskirts. Within the original application, the applicants discuss the construction of the landmark building set back from the main square on station road. The design team felt that the Victorian Terrace (Wilton Terrace) would look out of place in the context of the masterplan because of its smaller scale compared to those both sides and opposite. A review of the consultee responses at masterplan stage shows Wilton Terrace being rarely mentioned (although the replacement landmark building was – see Figure 4). Although Wilton Terrace was a BLI, the planning officer acknowledged there was a need to increase density across the site and that “*to refuse the masterplan on the grounds that these buildings should be retained alone would be very difficult to substantiate at appeal*” (Dyer, 2008a, p.77). However, in the officer’s report it does say that additional information would be needed when an application is made for Conservation Area Consent to allow for its demolition. This is important because it was identified by local residents when they were petitioning against the demolition of the building at a later date.

In April 2012, Brookgate applied for full planning permission (not reserved matters) to build two new office buildings on the Wilton Terrace site (see Figure 7). Full planning was required as the proposed buildings were larger than those proposed in the Outline Planning permission. At this point, local residents were very vocal against the demolition of the buildings and a group ‘Friends of Wilton Terrace’ was formed. This is a community organisation who actively campaigned to try and save the building. Their petition obtained 1347 supporters online and organisations such as SAVE Britain’s Heritage condemned the demolition (SAVE, 2017; Save Wilton Terrace, 2015). Members of the local community attempted to get the building spot-listed (receive a national designation to protect it from demolition) and produced a 51 page document outlining the historical significance of the building (The Friends of Wilton Terrace, n.d.). Their arguments included that census data showed key historical figures in Cambridge Alfred Kett and Thomas Thwaites Ball used to live in the building; there was evidence suggesting the architect was Richard Reynolds Roye (well-known in Cambridge); the building contained unique features such as the encaustic tiles and early use of concrete (an innovation in its time); and it was an early example of a building built for the middle class unlike the Victorian villas at the end of the street targeted towards the upper. A former architect drew up an alternative scheme which would allow Wilton Terrace to be retained and recognised that the listing should not ‘straightjacket’ the future of the building through a Heritage Partnership Agreement. However, the spot-listing was unsuccessful.



Figure 7: Wilton Terrace (left) and architectural model of replacement office buildings (right). Photo: Hannah Baker & Baker and Monster (In Press)

Although the planning office recommended the scheme (on the Wilton Terrace site) for approval, the planning committee refused the application in July 2012. In December 2012, a new application was submitted, this was recommended for approval by the planning office but refused by the councillors in March 2013. In July 2013, a third application was submitted, but similar to the former two, it was recommended for approval but refused in September 2013. As a result, the developers went to appeal regarding the first two applications. At this appeal, the council decided not to represent themselves and the Friends of Wilton Terrace, who were all unpaid volunteers, provided evidence. The Councillors' decision was overturned at the appeal by the Planning Inspector saying that the decision had been granted at Outline stage (Gray, 2013). This obviously caused frustration with the residents trying to protect the building as the Outline report stated Conservation Area Consent was still required and further justification was necessary. In addition the appeal led to a cost of £170,000 for the Council (Havergal, 2014) and some of the residents feel that the City's Councillors are now more hesitant to refuse applications due to the fear of the appeal process. From the researcher's point of view, to ease tensions, some small gestures to the history of the site could have been put in place. For example, residents wanted the encaustic tiles of the building to be saved for a museum, although it was difficult to retain these during the demolition process, parts could have been used for display as art within the development as a 'nod to the past' and recognition the building had been important to community members.

Potentially the 'Wilton Terrace story' raises questions about the planning process, not it being followed incorrectly but the way in which it works. As mentioned, very few people including the Victorian Society (who opposed the subsequent applications) commented on Wilton Terrace at the masterplan stage. Figure 3 showed that conversations had been dominated by transportation and the masterplan design features. The analysis and interviews imply that because the scheme was so large and complex, Wilton Terrace did not get the same level of attention at Outline because the demolition was overshadowed by the rest of the application. It was at this point that the masterplan concept, of which the landmark building replacing Wilton Terrace was approved and described as a fundamental part of the concept. It is easy to say people should have got involved earlier and this is a regret of the some of the local residents. It emphasises how long the masterplan process takes as the planning office, felt the demolition of Wilton Terrace had been justified at this Outline stage and was a strategic decision. Others argue that this was on the grounds that the quality of the new build was high. Opposed residents, as well as the former Conservation Officer feel that the development throughout the site and its quality have been compromised because of arguments relating to viability following the economic crash. The use of Outline Planning permission in a Conservation Area was opposed by the Commission for Architecture and the Built Environment (CABE) at the Outline Stage. Potentially more clarity was required at the approval stage to avoid confusion about the weight of the Outline and when the decision of demolition is actually made.

A local resident felt that although there was pre-application advice with the planning office at masterplan stage and various consultation events with the public, such as exhibitions, the public were insufficiently represented in the process. They said that in planning it is important to relate concerns to planning policies and sometimes the public do not have the means or knowledge to do this. The resident suggested there should be an independent consultant who can represent these points of view and this would avoid 'shouting' later on. The need to relate discussions and decisions to planning policy was reiterated during the interview with the former chair of the planning committee, showing that the resident's suggestion is possibly a strategy which could help improve public consultation strategies and social sustainability associated with large developments.

4.4.3. Technical issues

Apart from the Mill; Silo and 125 Hills Road, no other buildings were to be retained on the former Rank Hovis site. Planning permission for their demolition, through Conservation Area Consent was received before Outline consent. They were not seen as architecturally significant (excluding 127 and 127a Hills Road) and the land which they were on could be used more efficiently. This area has now been completed and includes a mix of student accommodation, private housing and a small area of affordable housing.

One of the first new buildings on the CB1 site was a new build which is occupied by Microsoft, this was seen as a key strategic move by the developers to attract other large companies and create the economic hub they desired. This new build required the demolition of Great Eastern House. Although this was the first pre-fabricated building in the area, the impact was mitigated through thorough recording the building. New build was desirable for the developers as market research showed the current demand was for large open plan office spaces. This was also one of the key reasons provided for the demolition of the Deities at the end of Station Road. Their limited floor to ceiling heights meant that it was difficult to get the available services into the building and they could not achieve the office environment which would be appealing to larger companies. The three new replacement buildings will have a basement which would not have been economically feasible with the existing and new buildings are either BREEAM excellent or outstanding (BREEAM is a commonly used sustainability assessment in the UK).

Critics of the development stated the new build replacement is not spectacular and does not reflect the character of Cambridge. Although the indoor spaces may be desirable for the occupier, from the outside they felt that it was a lost opportunity in terms of architectural design. One interviewee discussed that in 50 years' time there would be no desire to keep any of the new buildings in the area. On the other hand, the area and the buildings have attracted large businesses such as Amazon Research and Microsoft and won awards such as becoming a finalist in the "*Excellence in planning to create economically successful places*" from the Royal Town Planning Institute (Comber, 2017).

5. Conclusions

The CB1 site in Cambridge is a large regeneration project surrounding the railway station with the aspiration to become a transport gateway. This paper used the site as a descriptive case study by analysing planning documentation and conducted interviews with 13 decision-makers and/or stakeholders. The main reasons for building retention were heritage conservation and place-making. The railway station was Grade II listed by English Heritage (now Historic England) and it was clear this was never considered for demolition. Other buildings recognised as Buildings of Local Interest (BLIs) by previous studies produced by Cambridge City Council were retained because of the character they provided, although some BLIs were demolished. The main reasons for demolition were improving transportation systems; issues related to the masterplan vision which were justified on the grounds of public benefit; and technical issues, such as low to floor ceiling heights resulting in former office buildings not meeting modern day demands for large companies.

Within the site, there was a building which received local media attention due to its demolition, Wilton Terrace. Although the building was to be demolished in the approved Outline planning application, within the Planning Officer's report it was stated Conservation Area Consent was still required. When the developers put in subsequent applications for the sites development, there was a petition with over 1,300 signatures opposing it. Although the application was recommended for approval by the planning officer, the city councillors rejected it three times and the councillors' decision was then overturned at national appeal. An analysis of the planning documentation shows that the conversations at masterplan stage were dominated by transport and masterplan design issues. Due to the complexity of the scheme, various interviewees felt that the demolition of Wilton Terrace had been overlooked, although the planning office felt it had been justified and the appropriate documents had been provided at the Outline stage. Potentially the story of Wilton Terrace highlights issues with the planning process in terms of Outline applications. They are viewed favourably by developers because they provide the flexibility required in changing market conditions as masterplans can take over a decade to be completed and demands change. However, it does provide more uncertainty to the local residents and those affected. The CB1 development was criticised because of changes since outline, which compromised the integrity of the masterplan. The developers defended their decisions saying that these changes were necessary on the grounds of economic viability. Further exploration is required into whether Outline Planning should factor in these uncertainties and how this is communicated to the public to avoid opposition at a later date.

Another possible lesson identified in this research is the phasing of the development. This is always difficult as the developer needs to create the necessary cash flows to fund public realm features such as the large square in front of the station. When the taxi rank was built, the development received criticism as locals thought this was the final square which had been a fundamental part of the masterplan vision. This is only one half of the square and the demolition of an existing building is required for the next part. Hopefully, this is when the initial aim of that public space will come into fruition although some residents remain unconvinced. There is potential for future steps to be better communicated. Although hoarding shows images of the masterplan redevelopment, there could a visual timeline showing what is to come next. In an ideal situation, the square would be created first, however this does need to be balanced against commercial aspirations and feasibility studies.

Other ways in which character was added during construction was pop-up shops, showing that temporary measures can be used to provide character whilst the area is predominately a construction site, potentially there should have been more of this alongside additional gestures to the past through more public art referencing the past and existing buildings.

From the design team's perspective a key to their success was the adaptability of their masterplan and that their core consulting team (excluding architects) remained the same, allowing a strategic knowledge base and understanding of the scheme to build up over time. This is also reflected in their positive attitude towards pre-application advice with the planning office and the provision of 'shadow listed building and conservation area consents' which helped justify decisions at Outline stage. On the other hand, although there were public consultation events, one issue raised by an opposed resident was that the public should have access to a representative with planning knowledge who can raise their concerns at pre-application stage through a conversation relating to policy and this would help to avoid the shouting by local residents further down the line, which often does not get anywhere and leads to apathy in the planning system. This type of role would help to enhance the social sustainability of a project similar to this.

The CB1 site has resulted in a major change in the city and attracted well-known companies such as Microsoft (seen as the flagship company) and Amazon Research to the area, meeting the goal of becoming a new commercial quarter to the city and providing new employment opportunities, thus being economically successful on many levels.

As with many large scale developments, the project has inevitably caused contrasting opinions. Recent news articles, including the Guardian and Cambridge News have reflected frustrations of local

community members and architectural critics at the planning process and final quality of the design. Currently, the cultural and social aspects of the scheme have not been as successful as many people had hoped. To overcome this in future developments, this paper discussed providing better communication with the public about how past decisions were made and the future phasing of the development. Although this does exist within the planning documentation, it should be made more accessible and visible within the site.

In addition, there should be a review and more clarity about Outline Planning permission at a policy level and the allowances for changes after initial approval. It is accepted that developers need this flexibility as the process takes a long time and there are changes in the economic climate. However, the wording within the documentation such as 'providing Conservation Area Consent is granted' gives a sense of uncertainty to the community and the weight of the Outline planning needs to be made clearer at the earlier stages, as this is where the decision of demolition and adaptation was decided and potentially overlooked by stakeholders because of the complexity of the scheme.

6. Further work and limitations

This case study investigation has been descriptive and sits within a larger PhD project where other case studies will be analysed and compared. Further iterations of the document analysis and interviews need to be completed as this paper only reflects the preliminary findings and it is important to note that the paper deliberately reflects opposing opinions which have been interpreted by the researcher.

Alongside this, future research will focus in the theoretical underpinnings related to these findings and the decision-making process for masterplan sites.

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Appendix 1: Documents analysed for the Outline Planning Permission

Appendix reference in planning officer's report (Dyer, 2008a)	Document	Meeting date (if applicable)
U	Disability consultative panel	16 th April 2008
U	Disability consultative panel	6 th August 2008
Q	Application review meeting: questions and answers	7 th August 2008
O	Responses from Councillors and Political Parties – 2 nd Round	-
N	Neighbourhood consultations representations - revised application	-
M	Neighbourhood consultations representations	-
L	Neighbourhood consultations representations	-
K	Neighbourhood consultations representations	-
J	Neighbourhood consultations representations	-
I	Neighbourhood consultations representations	-
E	Comments from statutory and non-statutory consultees – revised application	-
D	Comments from statutory and non-statutory consultees	-
-	Notes of Development Control Forum	3 rd September 2008
F	Design and conservation panel minutes	2 nd April 2008
F	Design and conservation panel minutes	23 rd July 2008
F	Design and conservation panel minutes	20 th August 2008
-	Notes of Development Control Forum	25 th June 2008

Appendix 2: Documents analysed for subsequent application. Consultation responses only.

Details of applications available on Cambridge City (2017) Planning Portal

- 09_0706_CAC
- 11_0633_REM
- 12_0496_CAC
- 12_0502_FUL
- 12_1553_CAC
- 12_1600_CAC
- 12_1612_LBC
- 12_1622_FUL
- 15_0865_FUL
- 15_1759_FUL
- 15_2271_FUL